



## THE BANKS OF THE THAMES. VII.



HAMPTON BRIDGE.

If the reader have an opportunity of looking at a map of the course of the Thames, he will find that the point at which the river Wey enters the Thames is the most southern during its whole course. It is at that point that we resume our tour, between Chertsey and Oatlands.

Between Chertsey Bridge and the Wey, on the Surrey side of the river, is Woburn Park, a beautiful seat, the grounds of which were laid out as a *ferme ornée* by Mr. Southcote, whose talents in that species of gardening were thus apostrophised by Mason in his *English Garden*:—

On thee too, Southcote, shall the Muse bestow  
No vulgar praise, for thou to humblest things  
Could'st bring ennobling beauties: decked by thee,  
The simple farm eclipsed the garden's pride,  
E'en as the virgin blush of innocence;  
The mimicry of art.

Adjoining these grounds is Ham Farm, or Park, through which the river Wey finds its course to the Thames. This tributary, rising on the borders of Surrey, south-west of Haslemere, first takes its course by Liphook, in Hampshire: again entering Surrey it runs eastward to Godalming and Guildford, having been joined at Shalford by a stream which rises in the commons to the south of Wotton, and which, though small, supplies a great number of mills, besides embellishing many pleasure-grounds in its course. From Guildford the Wey passes north-eastward to Woking, leaves the town at a small distance on the north-west, then proceeds to

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Weybridge, to which place it gives name, and there discharges itself into the Thames.

Eastward of Weybridge, and following the curvature of the river for some distance, is the manor of Oatlands, once belonging to the late Duke of York, and remarkable for the many hands into which it has passed. Before the time of Henry the Eighth it belonged to the family of Rede, one of the members of which exchanged it with the monarch for the manor of Tanbridge, in the same county. While royal property it was at intervals the residence of some branches of the royal family. Queen Elizabeth occasionally visited it; Ann, consort of James the First, here built a room called the silk-worm room. Charles the Second settled this manor on his mother, Henrietta Maria, for her life. The mansion had been much injured during the civil wars, and after the death of the queen, Charles granted a lease of it to the Earl of St. Albans. It next passed into the possession of Lord Chief-Justice Herbert, upon whose attainder it was granted to the Earl of Torrington. The next possessor and occupant was the Duke of Newcastle, from the descendant of whom the Duke of York purchased Oatlands.

We must now cross the Thames, and view the little village of Shepperton, the retreat of many an adherent of Izaak Walton. The quiet and serene beauties of the neighbourhood are well calculated for the mind of such a man as "honest Izaak," who learned the art of angling on the banks of the Thames, and whose *Angler's Wish*

points out the spots, the employments, and the associations which delighted him.

I in these flowery meads would be:  
These crystal streams should solace me,  
To whose harmonious bubbling noise  
I with my angle would rejoice.  
Or, on that bank, feel the west wind  
Breathe health and plenty, please my mind,  
To see sweet dew-drops kiss these flowers,  
And then washed off by April showers:  
Here hear my Kenna sing a song;  
There see a blackbird feed her young,  
Or a laverock build her nest:  
Here give my weary spirits rest,  
And raise my low-pitched thoughts above  
Earth, or what poor mortals love:  
Thus free from law-suits, and the noise  
Of princes' courts, I would rejoice,  
Or with my Bryan and a book  
Loiter long days near Shawford brook;  
There sit by him and eat my meat,  
There see the sun both rise and set;  
There bid good morning to next day,  
There meditate my time away  
And angle on, and beg to have  
A quiet passage to a welcome grave.

While speaking of this prince of anglers, we may remark that the Thames, near the spot at which we have now arrived, abounds with almost every different species of fish that is to be found in other British rivers, such as perch, eels, roach, dace, bleak, barbel. The roach, it is said, are never seen below London bridge; the others are found as low as the water continues fresh. Flounders are seldom found above Fulham, whither they are conveyed by the tide. The salmon appears in the river about the middle of February, its capture being prohibited during certain of the autumnal and winter months. The shad, like the salmon, is a fish of passage: it appears about the beginning of June, the usual weight being from four to five pounds.

Again we cross to the Surrey side of the river, and pay a passing visit to the town of Walton. It has been stated, but on what grounds we do not know, that Walton was formerly in the county of Middlesex, but that, three or four hundred years ago, the old channel of the Thames was changed by an inundation, by which also a church was destroyed. At about a furlong above the bridge, at Walton, is a place called Cowey Stakes, where, according to some authorities, Cæsar passed the Thames. Stout stakes, driven into the bed of the river at this place, have been a source of much conjecture and discussion. Bede stated that the Britons had stationed themselves on the other side of the river, and had fenced the bank with sharp stakes, securely driven into the ground: these stakes he describes as being as thick as a man's thigh, and as being soldered or pointed with lead at the bottom, as if to make them penetrate more easily into the ground. It has, however, been justly observed by others that the object of driving these stakes could hardly have been the prevention of Cæsar's attempt to cross the river, since the stakes range directly across from bank to bank. Others have supposed that they are merely remains of a fishing-weir. Mr. Bray, the historian of Surrey, was informed by a fisherman, who had lived at Walton, and known the river all his life, that at this place he had taken up several stakes, of the thickness of his thigh, about six feet long, shod with iron, the wood very black, and so hard as to turn the edge of an axe. Mr. Speaker Onslow had a set of knife and fork handles made from them, which, when worked, were as black, hard, and heavy, as ebony. Whatever might have been the purpose for which these stakes were driven into the river, the remains of Roman camps in the neighbourhood seem to afford some support to the opinion that this was the spot at which Cæsar crossed the river.

Near Walton are the beautiful grounds of Paine's

Hill, long celebrated for the skill with which they were laid out by their proprietor, the Hon. Charles Hamilton. A considerable part of these grounds on the north side was taken from the barren heath; the south side was a bank above the river Mole, which runs at the foot of it. Availing himself of the inequalities of the land, he made his plantations and placed his buildings with the utmost judgment, and formed a spacious piece of water, which, though considerably above the bed of the river, is supplied from it by a simple but ingenious contrivance. Horace Walpole, in his *Observations on Gardening*, speaks with much commendation of these grounds. He distinguishes—

Three kinds of gardens,—the garden which connects itself with the park, the ornamental farm, and the forest or savage garden, by which I mean that kind of Alpine scenery, composed almost wholly of pines and firs, a few birch, and such trees as assimilate with a savage and mountainous country. Mr. Charles Hamilton, at Paine's Hill, has in my opinion given a perfect example of this mode in the utmost boundary of his garden. All is great and foreign and rude, the walks seem not designed, but cut through the wood of pines, and the style of the whole is so grand, and conducted with so serious an air of wild and uncultivated extent, that when you look down on this seeming forest, you are amazed to find only a few acres.

The church at Walton contains the tombs of several persons of some notoriety, among whom is William Lilly, the Astrologer. In the chancel are preserved several brass plates, which serve to record a very singular feat of activity. They appear to have been once laid over a grave stone. On one of these plates, John Selwyn, his wife, and eleven children, are represented in a praying posture: on another plate he is seen seated on the back of a stag, holding by one of the animal's horns with his left hand, and plunging a sword into its neck with his right. It appears, from a black-letter inscription, that this John Selwyn was under-keeper of the park at Oatlands, in the reign of Queen Elizabeth: the bugle-horn, the badge of his office, is apparent on the plates. This man, according to a tradition which seems to be supported by the testimony of the monument, was extremely famous from his strength, agility, and skill in horsemanship, specimens of all of which he exhibited before the queen, at a grand stag-hunt in that park. While attending at the hunt, as was the duty of his office, he, in the heat of the chase, suddenly leaped from his horse, upon the back of the stag, both running at the same time with the utmost speed, and not only kept his seat gracefully, in spite of every effort of the affrighted beast, but, drawing his sword, guided him with it towards the queen, and when near to her, plunged it into his throat, so that the stag fell dead at her feet.

Proceeding down the river from Walton, the view on either side is bounded by the osiers with which its banks are thickly covered, till the elegant village of Sunbury appears, presenting a long range of fine domestic structures, among which Sunbury Place, at its eastern extremity, is seen to great advantage from the river. This mansion, some years ago the residence of the Hon. Percy Wyndham, has four fronts, with a pavilion at each corner. The grounds are extensive, and the pleasure-lawn and plantations disposed with considerable taste and judgment. The ornamental dwellings of this handsome village are not confined to the margin of the river. The road leading northward to the common is bordered by many detached villas, with good continuous pleasure-grounds, and such likewise occur in other parts of the parish. Kempton Park contains an extensive mansion, built, in imitation of the Gothic style, by the late Mr. Hill, proprietor of the gunpowder mills on Hounslow Heath. On this domain stood a palace of our early kings, of the existence of which no tradition remains, though an inquisition, taken by order of Edward the Third, in 1331, and preserved among the records of

the Tower, describes it as having fallen into a dangerous state of dilapidation, and it was probably demolished at that time to save the expense of repairs.

The tourist next reaches Hampton Bridge, with the village of Hampton adjoining. In the reign of Edward the Confessor, Hampton belonged to Earl Algar, a powerful Saxon nobleman, and after the Norman Conquest it was held by Walter de St. Valeri, who probably gave the advowson of the living to the priory of Takely, in Essex, which was a cell to the abbey of St. Valeri, in Picardy, but the manor subsequently became the property of Sir Robert Gray, whose widow, in 1211, left it to the Knights Hospitallers, and they at one period had an establishment here for the sisters of that order. Three centuries afterwards it passed into the hands of the Crown, under circumstances which we shall detail when describing Hampton Court Palace.

The village of Hampton stands about one mile and a half from the palace, on the north side of the Thames. It contains several handsome villas, particularly one which belonged to the celebrated Garrick, on the lawn in front of which is a small temple dedicated to Shakspeare. Hampton Court Bridge, which is of wood, has a light and pleasing effect. There is also a ferry over the river at the village of Hampton, for carriages and foot-passengers.

By far the most attractive object at or near Hampton is Hampton Court Palace, a description of which we must defer to our next paper.

#### THE PATAGONIANS.

CAPTAIN KING, of H.M.S. *Adventure*, was engaged, with the expedition under his direction, for several years in surveying the southern shores of South America. The *Adventure* and the *Beagle* entered the Strait of Magalhaens (commonly called Magellan,) in the latter end of December, 1826. This was, of course, the summer season of these regions. Captain King thus describes his first interview with the Patagonians.

In the evening an Indian was observed on horseback riding to and fro upon the beach, but the weather prevented my sending a boat until the next morning, when Lieut. Cooke went on shore to communicate with him and other Indians who appeared, soon after dawn, upon the beach. On landing, he was received without the least distrust. They were eight or ten in number, consisting of an old man and his wife, three young men, and the rest children, all mounted on good horses. The woman, who appeared to be about fifty years of age, was seated astride upon a pile of skins, hung round with joints of fresh guanaco meat\* and dried horseflesh. They were all wrapped in mantles, made chiefly of the skins of guanacoës. These mantles were large enough to cover the whole body. Some were made of skins of the zorillo, or skunk, an animal like the pole-cat, but ten times more offensive; and others, of skins of the puma.

The tallest of the Indians, excepting the old man, who did not dismount, was rather less than six feet in height. All were robust in appearance, and with respect to the head, length of body, and breadth of shoulders, of gigantic size; therefore, when on horseback, or seated in a boat, they appeared to be tall, as well as large men. In proportion to the parts above-mentioned, their extremities were very small and short, so that when standing they seemed but of moderate size, and their want of proportion was concealed by the mantle, which enveloped the body entirely, the head and feet being the only parts exposed.

When Mr. Cooke landed, he presented some medals (provided for the purpose of giving away to the Indians,) to the oldest man, and the woman: and suspended them round their necks. A friendly feeling being established, the natives dismounted, and even permitted our men to ride their horses, without evincing the least displeasure at the free advantage taken of their good nature.

Mr. Cooke returned to the ship with three natives, whom he had induced to go with us to Elizabeth Island; the others

\* The flesh of the guanaco, or llama; which may be termed the camel of South America.

were to meet them and provide us with guanaco meat, to which arrangement the elders of the family had, after much persuasion, assented. At first they objected to their companions embarking with us, unless we left hostages for their safety; but as this was refused they did not press the point, and the three young men embarked. They went on board singing, in high glee.

While the ship was getting under way, I went ashore to a large number of Indians, who were waiting on the beach. When my boat landed they were mounted and collected in one place. I was surprised to hear the woman accost me in Spanish; of which, however, she knew but a few words. Having presented medals to each of the party, they dismounted (excepting the elders), and in a few minutes became quite familiar. By this time Capt. Stokes had landed, with several of his officers, who increased our party to nearly double the number of theirs; notwithstanding which they evinced neither fear or uneasiness. The woman, whose name was Maria, wished to be very communicative; she told me that the man was her husband, and that she had five children. One of the young men, whom we afterwards found to be a son of Maria, who was a principal person of the tribe, was mounted upon a very fine horse, well groomed, and equipped with a bridle and saddle that would have done credit to a respectable horseman of Buenos Ayres or Monte Video. The young man wore heavy brass spurs, like those of the Guacos of Buenos Ayres. The juvenile and feminine appearance of this youth made us think he was Maria's daughter, nor was it until a subsequent visit that our mistake was discovered. The absence of whiskers and beard gives all the younger men a very effeminate look, and many cannot be distinguished in appearance from the women, but by the mode in which they wrap their mantles around them, and by their hair, which is turned up and confined by a fillet of worsted yarn. The women cross their mantle over the breast like a shawl, and fasten it together with two iron pins or skewers, round which are twisted strings of beads and other ornaments. They also wear their hair divided, and gathered into long tresses or tails, which hang one before each ear; and those who have short hair, wear false tails made of horse-hair. Under their mantle the women wear a sort of petticoat, and the men a triangular piece of hide instead of breeches. Both sexes sit astride, but the women upon a heap of skins and mantles when riding. Both sexes wear boots made of the skins of horses' hind legs, of which the parts about the hock-joints serve for the heels.

The only weapons which we observed with these people were the bolas, or balls, precisely similar to those used by the Pampas Indians; but they are fitter for hunting than for offence or defence. Some are furnished with three balls, but, in general, there are only two. These balls are made of small bags or purses of hide, moistened, filled with iron pyrites, or some other heavy substance, and then dried. They are about the size of a hen's egg, and attached to the extremities of a thong, three or four yards in length. To use them, one ball is held in the hand, and the other swung several times round the head until both are thrown at the object, which they rarely miss. They wind round it violently, and, if it be an animal, throw it down. The bolas, with three balls, similarly connected together, are thrown in the same manner.

As more time could not be spared, we went on board.—The wind having been very strong and against the tide, the ship had much motion, which made our Patagonian passengers very sick. The next day, the wind proved contrary, and the Patagonians showed much uneasiness at being kept on board so much longer than they expected; but, as they seemed to understand the cause of their detention, and as their sickness ceased when we reached smooth water, they gradually recovered their good humour, and became very communicative. As well as we could understand their pronunciation, their names were Coigh, Coichi, and Aighen. The Indians of Tierra del Fuego, with whom they are not on friendly terms, are designated by them Sapallios. This name was applied to them in a contemptuous manner.

Aighen's features were remarkably different from those of his companions. Instead of a flat nose, his was aquiline and prominent, and his countenance was full of expression. He proved to be good-tempered and easily pleased; and whenever a shade of melancholy began to appear, our assurance of landing him on the morrow, restored his good humour, which was shown by singing and laughing.

Coichi's head was long and flat, at the top; the forehead

broad and high, but covered with hair within an inch and a half of the eyebrow, which had scarcely any hair. The eyes were small, the nose was short, the mouth wide, and the lips thick. Neck short, and shoulders very broad. The arms were short, and wanting in muscle, as were also the thighs and legs. The body was long and large, and the breast broad and expanded; his height nearly six feet.

The next day we rounded Elizabeth Island, and reached Cape Negro, where we landed the Indians, after making them several useful presents, and sending some trifles by Aighen to Maria, who, with her tribe, had lighted large fires about the country behind Peckett's Harbour, to invite us to land. Our passengers frequently pointed to them, telling us that they were made by Maria, who had brought plenty of guanaco meat for us.

In the following May the *Adventure* was again in the same neighbourhood.

After the gale had abated, we proceeded with fair weather and a light breeze to the Second Narrow, when the wind fell; but the tide being in our favour we passed rapidly through. On a hill near us we observed three or four Patagonian Indians standing together, and their horses feeding close to them. A fire was soon kindled, to attract our notice, to which signal we replied by showing our colours; and had we not already communicated with these people, we should certainly have thought them giants, for they "loomed very large" as they stood on the summit of the hill. This optical deception must doubtless have been caused by mirage: the haze has always been observed to be very great during fine weather and a hot day, arising from rapid evaporation of the moisture so abundantly deposited on the surface of the ground, in all parts of the Strait.

As soon as the Patagonians found they were noticed, they mounted, and rode along the shore abreast of us, being joined by other parties, until the whole number could not have been less than forty. Several foals and dogs were with them. Having anchored in Gregory Bay, where I intended remaining for two days to communicate with them, I sent up a rocket, burnt a blue light, and dispatched Lieutenant Cooke on shore to ask for a large supply of guanaco meat, for which we would pay in knives and beads. The boat returned on board immediately, bringing four natives, three men, and Maria. This rather remarkable woman must have been, judging by her appearance, about forty years old; she is said to have been born at Assuncion, in Paraguay, but I think the place of her birth was nearer Buenos Ayres. She spoke broken, but intelligible, Spanish, and stated herself to be sister of Bysante, the cacique of a tribe near the Santa Cruz River, who is an important personage, on account of his size (which Maria described to be immense,) and his riches. In speaking of him, she said he was *very* rich; he had many mantles, and also many hides ("*muy rico, tiene muchas mantas y tambien muchos cueros.*") One of Maria's companions, a brother of Bysante, was the tallest and largest man of this tribe; and though he only measured six feet in height, his body was large enough for a much taller man. He was in great affliction; his daughter had died only two days before our arrival; but, notwithstanding his sad story, which soon found him friends, it was not long before he became quite intoxicated, and began to sing and roar on the subject of his misfortunes, with a sound more like the bellowing of a bull than the voice of a human being. Upon applying to Maria, who was not quite so tipsy as her brother, to prevent him from making such hideous noises, she laughed and said, "Oh, never mind, he's drunk, poor fellow! his daughter is dead," (*Es borracho, povrecito, murio su hija*); and then, assuming a serious tone, she looked towards the sky, and muttered in her own language a sort of prayer or invocation to their chief demon, or ruling spirit, whom Pigafetta, the companion and historian of Magalhaens, called *Setebos*, which Admiral Burney supposes to have been the original of one of Shakspeare's names in the *Tempest*:—

..... His art is of such power,  
He could control my dam's god Setebos.

Maria's dress was similar to that of other females of the tribe; but she wore ear-rings, made of medals stamped with a figure of the Virgin Mary, which with the brass pin that secured her mantle across her breast, were given to her by one Lewis, who had passed by in an American sailing vessel, and who, we understood from her, had made them "Christians."

I accompanied Maria to the shore. On landing, she conducted me to the place where her family were seated round her property. They consisted of Manuel, her husband, and

three children, the eldest being known by the appellation of Capitan Chico, or "Little Chief." A skin being spread out for me to sit on, the family and the greater part of the tribe collected around. Maria then presented me with several mantles and skins, for which I gave in return, a sword, remnants of red baize, knives, scissors, looking-glasses, and beads: of the latter I afterwards distributed bunches to all the children, a present which caused evident satisfaction to the mothers, many of whom also obtained a share. The receivers were selected by Maria, who directed me to the youngest children first, then to the elder ones, and lastly to the girls and women. It was curious and amusing to witness the order with which this scene was conducted, and the remarkable patience of the children, who, with the greatest anxiety to possess their trinkets, neither opened their lips, nor held out a hand, until she pointed to them in succession.

Having told Maria that I had more things to dispose of for guanaco meat, she dismissed the tribe from around me, and, saying she was going for meat, mounted her horse, and rode off at a brisk pace.

On her return, with a very small quantity of guanaco meat, her husband told her that I had been very inquisitive about a red baize bundle, which he told me contained "*Cristo*," upon which she said to me, "*Quiere mirar mi Cristo?*" (Do you wish to see my Christ?) and then, upon my nodding assent, called around her a number of the tribe, who immediately obeyed her summons. Many of the women, however, remained to take care of their valuables. A ceremony then took place. Maria, who by the lead she took in the proceedings, appeared to be high priestess as well as cacique of the tribe, began by pulverising some whitish earth in the hollow of her hand, and then taking a mouthful of water, spat from time to time upon it, until she had formed a pigment, which she distributed to the rest, reserving only sufficient to mark her face, eyelids, arms, and hair with the figure of the cross. The manner in which this was done was peculiar. After rubbing the paint in her left hand smooth with the palm of the right, she scored marks across the paint, and again others at right angles, leaving the impression of as many crosses, which she stamped upon different parts of her body, rubbing the paint and marking the crosses afresh, after every stamp was made.

The men, after having marked themselves in a similar manner (to do which some stripped to the waist, and covered all their body with impressions), proceeded to do the same to the boys, who were not permitted to perform this part of the ceremony themselves. Manuel, Maria's husband, who seemed to be her chief assistant on the occasion, then took from the folds of the sacred wrapper an awl, and with it pierced either the arms or ears of all the party, each of whom presented in turn, pinched up between the finger and thumb, that portion of flesh which was to be perforated. The object evidently was to lose blood, and those from whom the blood flowed freely showed marks of satisfaction, while some whose wounds bled but little underwent the operation a second time.

When Manuel had finished he gave the awl to Maria, who pierced his arm, and then, with great solemnity and care, muttering and talking to herself in Spanish, (not two words of which could I catch, although I knelt down close to her, and listened with the greatest attention,) she removed two or three wrappers, and exposed to our view a small figure, carved in wood, representing a dead person, stretched out. \* \* \* \* Each family possesses its own household god, a small wooden image, about three inches in length, the rough imitation of a man's head and shoulders, which they consider as the representative of a superior being, attributing to it all the good or evil that happens to them.

A GENTLEMAN, who had recently become known to the bishop, asked me one day to let him look into a copy of the *Protestant Kempis*. He opened the volume at p. 269, and, pointing to a note at the foot of the page, he observed that "he knew a family, which had been led to study the works of Bishop Taylor, (whom previously they had known only by name,) by that single note of Bishop Jebb." His quotation made so deep an impression, that the family in question procured Taylor's works on the strength of it; and had since become intimately conversant with his writings. The anecdote is a proof of the service which may be rendered, in a line or two, where taste and judgment are directed to the promotion of good. This one quotation was, probably, more effective than the most laboured panegyric.—FORSTER'S *Life of Bishop Jebb*.

## THE HAWK-MOTH.

The helpless crawling caterpillar trace  
 From the first period of his reptile race;  
 Clothed in dishonour, on the leafy spray  
 Unseen, he wears his silent hours away,  
 Till satiate grown of all that life supplies,  
 Self taught the voluntary martyr dies.  
 Deep under earth his darkling course he bends,  
 And to the tomb a willing guest descends:  
 There long secluded in his lonely cell  
 Forgets the sun, and bids the world farewell:  
 O'er the wide waste the wintry tempests reign;  
 And driving snows usurp the frozen plain:  
 In vain the tempests beat, the whirlwind blows,  
 No storms can violate his grave's repose.  
 But, when revolving months have won their way,  
 When smile the woods, and when the zephyrs play,  
 When laughs the vivid world in Summer's bloom,  
 He bursts and flies triumphant from the tomb;  
 And while his new-born beauties he displays,  
 With conscious joy his altered form surveys;  
 Mark while he moves amid the sunny beam,  
 O'er his soft wings the varying lustre gleam;  
 Launched into air on purple plumes he soars,  
 Gay natures face with wanton glance explores,  
 Proud of his various beauties wings his way,  
 And spoils the fairest flowers, himself more fair than they!  
 And deems weak man the future promise vain,  
 When worms can die, and glorious rise again?

*Sphinx Nerion*

THE Sphinxes, or Hawk-moths, belong to a very interesting family of lepidopterous\* insects; which family has been named *Crepuscularia*, from the circumstance that many of the species are observed chiefly during the morning and evening twilight. These insects are distinguished by the antennæ, which are prismatic or fusiform, and usually thickest in the middle. Their colours are in general agreeably varied, the under wings being often banded. They fly with great strength and celerity, owing to the extent and firm consistence of their wings, the powerful muscles by which they are moved, and the bird-like manner in which their taper bodies are poised. During flight they produce a strong humming noise, occasioned by the rapid vibration of these wings, which renders their approach easily perceptible. Instead of settling upon flowers, like bees and other insects, they are frequently observed merely to hover over or before them, and to extend their long tubular trunks towards the nectaries. This peculiar hovering motion has obtained for them the appellation of *Hawk-moths*. The motions of one of these insects is beautifully described by Miss Mitford, who, in noticing her garden, traces "the gay gambols of the common butterflies, as they sport around the dahlias, or watches that rarer moth, which the country-people, fertile in pretty names, call the bee-bird; that bird-like insect which flutters in the hottest days over the sweetest flowers, inserting its long proboscis into the small tubes of the jasmine, and hovering over the scarlet

flowers of the geranium, whose bright colour seems reflected on its own feathery breast; that insect which seems so thoroughly a creature of the air, never at rest, always when feeding self-poised and self-supported, and whose wings in their motion have a sound so deep, so full, so lulling, and so musical; nothing so pleasant as to sit amid that mixture of the flower and the leaf, watching the bee-bird."

The caterpillars of these moths vary greatly in their forms, especially in the fore-part of the body. In some this part is susceptible of great elongation, like the trunk of an elephant, whence those species are called elephant hawk-moths. This motion is effected when the insect is feeding or seeking food, at which time the neck assumes a narrow conical form, truncated in front, the head and face forming the truncated part; when in repose they withdraw this elongation. Other species elevate the fore-part of the body, while the rest of the body is applied flat to the surface on which it rests, which posture, resembling that of the Egyptian sphinx, has furnished a name to the insects. In some the skin is of so tough or flexible a texture, as to be capable of bearing great pressure without injury. Bonnet pressed the grub of the privet hawk-moth under water, till it was as flat and empty as the finger of a glove, yet within an hour it became plump and lively, as if nothing had happened. These caterpillars have also a horn on the eleventh ring, directed backwards, and a little curved. This, from its figure and direction, has been supposed an offensive or defensive weapon; but no one has observed the insect make use of it for such purposes. Besides, though called a horn, it is of a fleshy substance, and too soft to inflict any injury.

The caterpillars of the hawk-moths are smooth, and furnished with sixteen legs, the ten posterior being called pro-legs†; they are of cylindric form. They live solitarily, and feed on the leaves of vegetables. They are at first very active, and when disturbed, fall from the leaf upon which they were placed, suspending themselves by a thread; when more aged they become sluggish. They undergo the chrysalis state and make their cocoons in the earth, or upon its surface covered with leaves. The chrysalis state generally lasts seven or eight months.

One of the most elegant insects of this genus is the *Sphinx Ligustri*, or Privet hawk-moth. It is a large insect, measuring nearly four inches and a half from wing's end to wing's end; the upper wings are of a brown colour most elegantly varied or shaded with deeper and lighter streaks and patches; the under wings and body are of a fine rose colour, barred with transverse black stripes. The caterpillar, which is very large, is smooth, and of a fine green, with seven oblique purple and white stripes along each side; and furnished at the hinder part with the horn referred to above. This beautiful caterpillar is often found in the months of July and August feeding on the privet, the lilac, the poplar, and some other trees, and generally changes to a chrysalis in August or September, retiring for that purpose to a considerable depth beneath the surface of the ground, and after casting its skin, continuing during the whole winter in a dormant state, the sphinx emerging from it in the succeeding June.

*Sphinx ocellata* is perhaps still more beautiful: it is rather smaller than the preceding: the body is brown, as also the wings, which are finely clouded with different shades, while the lower wings are of a bright rose colour, each marked with a fine ocellated black spot, with a blue

\* The insects of this order were named by Linnaeus *LEPIDOPTERA*, or winged with scales; that is, the wings are covered with imbricated scales or feathers, presenting to the naked eye only the appearance of mere particles of dust or powder, but exhibiting under the microscope a regular series of scales or feathers, peculiar, as to shape or size, to each species.

† Those caterpillars which spin silk, often escape a fall or elude danger by means of the silken line which they produce. With this line they often drop through a space of several feet, and frequently disappoint a bird that has marked them out for a prey. When the danger is over, the caterpillar returns to its former situation by climbing its silken cable, for which purpose its fore-legs are furnished with a curved claw; while the pro-legs, as they are called, are well adapted for holding it firm to the branch when it has regained it, the pro-legs being constructed on the principle of forming a vacuum, like the leather sucker with which boys lift and drag stones. So difficult is it to remove a caterpillar from a branch without injury, that collectors usually cut off the branch and bear the insect away upon it.

interior circle, and a black centre. This insect proceeds from a green caterpillar of a rough or shagreen-like surface, marked on each side by seven oblique yellowish-white streaks, and furnished like the preceding with a horn at the tail. It is principally found on the willow; it retires underground in August or September to undergo its changes, and re-appears in the following June as a perfect insect.

The most remarkable of all European insects of this genus is the *Sphinx Atropos* of Linnæus. This is larger than the two former; the upper wings are of a fine dark grey, with slight markings of orange and white; the under wings are bright orange, marked by a pair of transverse black bands: the body is also orange-coloured, marked at the sides with black bars, while along the top of the back from the thorax to the tail runs a broad blue-grey stripe: on the top of the thorax is a very large patch, of a most singular appearance, exactly resembling the usual aspect of a skull, or death's head; it is of a pale grey, varied with dull ochre colour and black. This peculiar appearance has given to the insect the name of the Death's-head moth, a figure of which may be seen by referring to *Saturday Magazine*, Vol. I., p. 69, with some ingenious remarks thereon by the author of the *Journal of a Naturalist*.

When in the least disturbed or irritated, this insect emits a stridulous sound, something like the squeaking of a bat or mouse, and from this circumstance, as well as the symbol of mortality which is impressed upon it, it is held in much dread by uneducated persons in several parts of Europe, its appearance being regarded as a kind of ill omen, or harbinger of approaching fate. We are informed by the celebrated Reaumur, that the members of a female convent in France were thrown into great consternation by the appearance of one of these insects, which happened to fly in during the evening at the door of the dormitory. A number of these insects appeared some years ago in the province of Bretagne to the great terror of the peasants, who believed them to be the cause of certain epidemic maladies, which then prevailed in that country. In the Isle of France the natives believe that the dust cast from the wings of this insect in flying through an apartment, is productive of blindness to the visual organs on which it falls.

The caterpillar from which this curious sphinx proceeds, is in the highest degree beautiful, and far surpasses in size every other European insect of the kind. It sometimes measures nearly five inches in length, and is of considerable thickness: its colour is bright yellow; the sides are marked by a row of seven most elegant broad stripes or bands of a mixed violet and sky-blue colour; the tops of these bands meet on the back in so many angles, and are varied on that part with jet-black spots: it is furnished with the usual horny appendages on the last joint.

This caterpillar is principally found on the potato and the jasmine, these plants being its favourite food. It usually changes into a chrysalis at the latter end of the month of August, and the complete insect emerges in the following month: but some individuals have been observed to remain unchanged till the following summer.

*S. hippophaes* is an inhabitant of Dauphiny: the larva, either to avoid the glare of light, or the attacks of enemies, conceals itself during the day beneath the dead leaves at the roots of trees, and emerges only at night for the purpose of seeking food.

The sphinx affords a striking emblem of the change which we ourselves shall undergo, when our present life has terminated. When the first period of the insect's life has passed, it retires to the earth, and there remains buried during several months; it then rises to the surface, and bursting from the confinement of its tomb, commences a being of powers comparatively so exalted,

and of beauty so superior, as not to be beheld without the highest admiration.

The plan of nature, in creating these sylph-like inhabitants of air is wonderful indeed. Who could ever pre-suppose that so lively, delicate, and brilliant an insect as a butterfly, so airy in its habits, and so fastidious in its food, should be derived from a crawling, voracious worm? The butterfly, on issuing from its cocoon, is entirely formed. Nothing of its prior state remains. Its figure, its habits, all, in a word, is so changed, that it can no longer be recognised. The butterfly is agility itself, and grace personified. It appears to disdain the earth, and in its magnificent robe to seek the skies, while it is sustained with nectar like the fabled divinities of old. Issuing from its dark cradle, it seems to rejoice in its new-born existence, to court the sun-beam, or delight in recognising the groves or fields where its laborious infancy had been passed. Its life is now a scene of perpetual enjoyment. It wanders from flower to flower, continually in pursuit of the pleasures of novelty and change.—GRIFFITH'S CUVIER.

In March last, as I was repairing to the native village of Bustem, to survey a bridge which was thrown across the road, on my route from the station of Jellasure, on crossing the Soubunreeka river, my attention was attracted to a number of human skeletons, which lay scattered in various directions upon the white sands adjacent to the course of the stream. Upon inquiry I learned that these unfortunate relics were the remains of pilgrims who were on their road to the great pagoda of Juggernaut, and had been drowned two evenings before by means of a ferry-boat sinking with them during a violent north-wester. On my approaching several of these sad vestiges of mortality, I perceived that the flesh had been completely devoured from the bones by Pariah dogs, vultures, and other obscene animals. The only portion of the several corpses I noticed that remained entire and untouched were the bottoms of the feet and the insides of the hands, and this extraordinary circumstance immediately brought to mind that remarkable passage recorded in the Second Book of Kings, relating to the death and ultimate fate of Jezebel, who was, as to her body, eaten of dogs, and nothing remained of her but the "palms of her hands and the soles of her feet." The former narrative may afford us corroborative proof of the rooted antipathy that the dog has to prey upon the human hands and feet. Why such should be the case remains a mystery.—From an Indian Correspondent of the Times.

On all sides, are we not driven to the conclusion that, of the things which man can do or make here below, by far the most momentous, wonderful, and worthy are the things that we call Books! Those poor bits of rag-paper, with black ink on them, from the daily newspaper to the sacred Hebrew Book, what have they not done! what are they not doing! For, indeed, whatever be the outward form of the thing, (bits of paper, as we say, and black ink) is it not verily, at bottom, the highest act of man's faculty that produces a book? It is the *Thought* of man,—the true thaumaturgic virtue, by which man works all things whatsoever. All that he does, and brings to pass, is the vesture of a Thought. This London City, with all its houses, palaces, steam-engines, cathedrals, and huge immeasurable traffic and tumult, what is it but a thought,—but millions of thoughts made into one,—a huge immeasurable spirit of a Thought, embodied in brick, in iron, smoke, dust, palaces, parliaments, Hackney coaches, Katherine Docks, and the rest of it! Not a brick was made but some man had to think of the making of that brick. The thing we called "bits of paper with traces of black ink" is the purest embodiment a thought of man can have. No wonder it is, in all ways, the activist and noblest.—CARLYLE.

DURING the preceding year Tuweilib had spent a fortnight in and near the great plain el-Ka'a, not far from Mount Serbal, pasturing his camels, without a drop of water for himself or them. He drank the milk of the camels; and they, as well as sheep and goats, when they have fresh pasture, need no water. In such a case they will sometimes go for three or four months without it. Others had told us that the camel needs water once in every three days in summer, and every five days in winter, but this is probably when the pastures are dry, or when they are fed on provender.—ROBINSON'S Palestine.

## MAPS AND MAPPING. I.

PROGRESS OF MAP-MAKING.—ANCIENT MAPS.—  
MAPS OF THE MIDDLE AGES.

O'er the map my finger taught to stray,  
Cross many a region marks the winding way;  
From sea to sea, from realm to realm I rove,  
And grow a mere geographer by love.

AMONG the many concerns which engage the intellectual attention both of those who tarry at home and those who travel abroad, whether for business or pleasure, MAPS are of essential importance. As the latter travel in reality, so the former may accompany them in imagination, and picture up the scenes which they describe. We propose, therefore, to furnish in this paper, for the general benefit of our readers, a concise detail of the history of maps, and, in two succeeding articles, a brief account of the principles on which they are usually constructed.

The word "Map" seems to have been derived from the Latin *mappa*, a table-napkin, which, in the public games of the Roman circus was hung out at the prætor's, or other great magistrate's seat, as a signal for the race, or other diversions, to begin. The mappa was received for this purpose by the *mapparius*, from the consul, prætor, or other great officer. Notice was anciently given by sound of trumpet, but Nero is said to have introduced the mappa, by throwing his napkin out of the window, to satisfy the people, who grew noisy at the delay of the sports while he was at dinner.

Without entering at present into a scientific definition of our subject, we may just state that maps have been ordinarily understood to be plane drawings, meant to represent the form, extent, position, and other particulars of the various countries of the earth. Such maps as have been intended to delineate more particularly the ocean, or any part of it, have commonly borne the name of "Charts."

It seems natural for man, even in the earliest stages of society, to endeavour to express, with more or less of proportion, the principal features of the countries in and about which he dwells. An intimation of this branch of the geographical art being in use among the Israelites is given at the beginning of the 18th chapter of the Book of Joshua: the description of the land of Canaan there spoken of was enjoined in the year 1444 B.C., and was made in order that the Jewish leader might apportion to the several tribes their respective inheritances. The Israelites must have derived their knowledge in this way from the Egyptians, as the Greeks drew their information from the Phœnicians, the great traders of antiquity, who, in the furtherance of their mercantile pursuits, had probably visited every spot of the then known earth.

The first person, however, who is spoken of as having constructed anything like a regular map of the world was Anaximander, the Milesian philosopher, who flourished in the sixth century before Christ. He also made Globes: he taught that the earth was of a cylindrical form; that men were born of earth and water mixed together, and heated by the beams of the sun; that the earth moved, and that the moon received light from the sun, which he considered as a circle of fire, like a wheel, about twenty-eight times bigger than the earth. He also made some of the earliest sun-dials.

Herodotus relates that certain Persians, commissioned by Darius the First, sailed from Sidon, in Phœnicia, to the coasts of Greece, which they examined, and transcribed, until they arrived as far as Tarentum, in Italy. They seem to have produced a sort of outline map: this took place about 500 B.C. Not long after, as we are told by the same writer, Aristagoras, visiting Cleomenes, king of Sparta, in order to solicit his assistance against the Persians, exhibited to the king a brazen plate or tablet, whereon the round earth was engraved, together

with the sea and all the rivers. The object in view was of course to explain to the Lacedæmonians the situation of Persia,—the probable route of the invading army,—and the nature and object of the desired assistance.

Itinerary maps of the places of encampment were almost indispensable to the commanders of armies. Diogenes and Beton are mentioned by Pliny, as the surveyors of the marches of Alexander, who was very careful in examining the measures of his surveyors, and in obtaining his descriptions from the most skilful persons.

The progress of map-making was very considerably advanced by Eratosthenes, who flourished in the third century prior to the Christian era. He was keeper or president of the Library at Alexandria. He has been called a second Plato, the cosmographer and the geometer of the world. He is supposed to be the inventor of the armillary sphere. With the instruments with which the munificence of the Ptolemies, kings of Egypt, supplied the Library of Alexandria, he was enabled to measure the obliquity of the ecliptic, which he called  $20\frac{1}{2}^{\circ}$ , it being in fact nearly  $23\frac{1}{2}^{\circ}$ . He also measured a degree of the meridian, and determined the extent and circumference of the earth with great exactness, by means adopted by the moderns. He introduced into his map a regular parallel of latitude, which he accomplished by tracing a line over certain places whose longest day was observed to be of the same length. This parallel extended from the Straits of Gibraltar to the mountains of India, passing through the island of Rhodes, and, from its central position with respect to the principal ancient nations, it became a standard of reference in the maps of this period. Succeeding geographers made many attempts to determine the longitude of places by measurements of this line, but with no great success. He also drew a meridian from Meroë, in Western Ethiopia, through Syene, to Alexandria, in Lower Egypt. At this time a connexion was made to subsist between astronomy and geography, so that the advancement of the former tended to the improvement of the latter. Hence it was that Hipparchus, who flourished about 150 B.C. by fixing the construction of maps on something like a mathematical basis, enabled the geographer to lay down his latitudes and longitudes upon certain principles.

The celebrated geographer Strabo, who died A.D. 25, furnishes us with the state of geography in the age of Augustus Cæsar. But the extent of the earth's surface known to this writer does not much exceed that which was known four or five centuries earlier. His map of the world exhibits some remarkable errors. He supposed the Pyrenees to run north and south: he cuts off the projecting province of Brittany from France,—places Ireland, not to the west, but to the north of Britain,—and makes the Caspian communicate with the Northern Ocean, though Herodotus had accurately described it as a lake. A very good illustration of the geography of the ancients may be seen in the frontispiece to No. 379 of this work.

A sort of map, or road-book, called an *Itinerary*, was much in use among the Romans at about the commencement of the Christian era. It resulted from the necessity for furnishing the leaders of armies with information of their destined route; and though these itineraries, or surveys, were made with considerable care, there are no traces of mathematical geography in those which have been handed down to us, the chief object in view being clear directions for the march of their armies.

All the provinces of the Roman empire had been surveyed when Ptolemy composed his system of geography, in the middle of the second century of the Christian era. This production is valuable; because he has therein carried into full practice, and to greater perfection, the system of latitudes and longitudes, published by the celebrated Hipparchus, about three hundred years before.

As Ptolemy derived his information respecting the

distances of places chiefly from itinerary measurements, which usually exceeded the truth, it is not surprising that his map of the world should exhibit enormous errors, more especially in places beyond the ordinary range of the Roman empire. He represents, for instance, the northern coast of Africa nearly as a straight line! He places Carthage 313 English miles to the south of its true place, and Constantinople 276 miles too far to the north. He also makes the Mediterranean sea about 1000 English miles longer than it really is! Some of the most distinguished and best known places in Europe have been set down 500 or 600 miles too far apart:—and, strange to say, many such gross inaccuracies continued in the maps till the beginning of the eighteenth century! But we have already noticed this subject in our second article on Ancient NAVIGATION: Vol. XIII., p. 208.

It seems not improbable that the maps found in the MSS. of Ptolemy are really copies of, or derived from, original maps constructed by him, or under his care. So great an influence had this writer on the minds of most modern geographers until within 150 years ago, that many instances might be adduced, in which the authority of Ptolemy, who was but slightly acquainted with one half of the globe, was blindly submitted to in an age when Europeans wandered over its entire surface.

The itineraries of the Romans were of two kinds,—*Picta*, and the *Annotata*, the drawn and written: the latter contained the names of the stations and chief places from one another, without any detail: whereas, the former have all the graphic finish of a modern map. Of the former kind of itinerary, the most remarkable that remain to us, are the Itinerary of Antonine, the age of which it is difficult to ascertain; and the Itinerary of Jerusalem, a fragment which points out the whole route from Bordeaux to that city.

Of the painted itineraries, a fine specimen is still preserved in the Imperial Library of Vienna; and it has been engraved and published under the name of the *Peutingerian Table*. It was probably originally made about the time of the Emperor Severus, or in the year 230 A.D. The copy which at present exists, is thought to be the work of a monk of the thirteenth century; it owes its name to Conrad Peutinger, a citizen of Augsburg, to whom it formerly belonged, and by whom it was illustrated in a learned commentary. The countries marked on this map are not placed in it according to their geographical position, their respective limits, and their real size; they are ranged arbitrarily, one after the other from west to east, without any regard to figure, or latitude and longitude. This table, or picture, is about twenty-two feet long, and one foot broad.

Some curious particulars have come down to us illustrative of the geographical ignorance of the MIDDLE AGES. The maps of these times may be generally classed, first,—into those in which the notions of the ancients were adhered to; and secondly,—those which exhibited new discoveries or countries popularly believed to exist. Many maps, of the first class are extant, in which the old world is represented as one great island; Africa terminating to the north of the equator. Among maps of the second class are those which seem to show some important discoveries in the west of Europe and of Africa in the twelfth and thirteenth centuries.

The geography of the Arabians is but imperfectly known. Their most eminent geographer, Al Edrissi, who lived about the middle of the twelfth century, divided the world into seven climates, from the equator northward; and each climate was again divided into eleven equal parts, from the western coast of Africa to the eastern coast of Asia; the inconvenience of which arrangement is very obvious.

In the year 1383, two noble Venetians, named Zeni, having entered into the service of a prince of the Faroe Islands, which lie to the north of Scotland, drew up a

map to illustrate the account of their navigations in these seas.

In some of the old British maps, which are rude in design and execution, Scotland is represented as an island separated from England by an arm of the sea. Ireland is also divided in two by the river Boyne, which is represented as a canal connecting the Irish Channel with the Atlantic. The towns are drawn in these maps of a disproportionate size; and the abbeys, with their walls, gates, and belfries, occupy so great a space, as to leave little room for the rivers, boundary-lines, or places of less seeming importance.

We have elsewhere noticed the famous silver map of Charlemagne\*; but one of the most curious geographical monuments of those times is a map preserved in the Library of Turin, attached to a manuscript copy of the Apocalypse, which was written in the year A.D. 787. It represents the earth as a plane bounded by a circular line, and divided into three unequal parts. To the south, Africa is separated by the ocean from a land called the *fourth division of the world*, where the antipodes dwell, and which the excessive heat of the torrid zone had hitherto prevented from being visited. At the four sides of the world are represented the figures of the four winds, each astride upon a pair of bellows, which he works, and at the same time, with a conch-shell applied to his mouth, he blows hurricanes, as may be conjectured from his distended cheeks. At the top of the map, which is the east, are Adam and Eve, the serpent, and the tree of forbidden fruit: at their right hand is Asia.

The maps of the middle ages erred as often from the love of mere systematical arrangement, as from want of information. This is shown in the map of Martino Sanudo, which was published at the beginning of the fourteenth century, and has *Jerusalem* as its centre.

Passing by many other old maps, which were executed before the discovery of America by Columbus at the end of the fifteenth century, one remains to be noticed, which, if its reality were fully proved, would reduce the merit of that great navigator to the mere re-discovery of countries which were known, perhaps, a century before his time. This supposed discovery is indicated in a map constructed by Andrea Bianco in 1436, and preserved in the Public Library of Venice. In this map, in addition to much correct, false, and imaginative information, is represented, to the west of the Canary Islands, a country of great length, and of a quadrilateral form, to which is given the name of *Antilia*. This country, in the same situation and with the same name, is also found on the globe made by Martin Behaim, at the close of the fifteenth century. Many persons believe that the Antilia of Bianco was the continent of South America; while others maintain that it owed its existence wholly to the author's imagination. The maps of Bianco, however, contain much to interest us, independent of their intrinsic merit: in the first sheet of his collection is represented the mariner's compass, together with some nautical tables.

With the discovery of America, and consequent extension and improvement of geographical information, maps became more clear and correct, and began, at length, to be constructed on principles more in accordance with the precision of science, as we shall show in our next paper.

\* See *Saturday Magazine*, Vol. XIII., p. 108.

A CERTAIN petulant Greek, objecting to Anacharsis that he was a Scythian; "True," said Anacharsis, "my country disgraces me, but you disgrace your country."

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